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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/652,896      | 08/29/2003  | Larry Larkin         | 396/453             | 9570             |

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EXAMINER

POPOVICS, ROBERT J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1724

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |                                      |  |
|------------------------------|---------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/652,896  | <b>Applicant(s)</b><br>LARKIN ET AL. |  |
|                              | <b>Examiner</b><br>Robert J. Popovics | <b>Art Unit</b><br>1724              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 13-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Election/Restrictions***

Applicant's election with traverse of Group I (Group II has been joined with Group I) in the reply filed on August 05, 2005 is acknowledged. The traversal is on the ground(s) that "the product requires that it be made by the process of sonic welding." This is not found persuasive because Applicants have not established that the making of the product employing a process other than sonic welding would result in a structural difference. See the MPEP:

## 2113 [R-1] Product-by-Process Claims

**PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO THE MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE IMPLIED BY THE STEPS**

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted) (Claim was directed to a novolac color developer. The process of making the developer was allowed. The difference between the inventive process and the prior art was the addition of metal oxide and carboxylic acid as separate ingredients instead of adding the more expensive pre-reacted metal carboxylate. The product-by-process claim was rejected because the end product, in both the prior art and the allowed process, ends up containing metal carboxylate. The fact that the metal carboxylate is not directly added, but is instead produced in-situ does not change the end product.).

>The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product. See, e.g., In re Garnero, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979) (holding "interbonded by interfusion" to limit structure of the claimed composite and noting that terms such as "welded," "intermixed," "ground in place," "press fitted," and "etched" are capable of construction as structural limitations.)

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 103***

Claims 1-12 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admissions.

[0002] Many filters are made with multiple layers of filtration material bonded together. Multilayer filtration materials are useful as fluid filters, for example, as particulate filters for use in automobiles. Multilayer filtration, also known as serial filtration, may be used in automobile transmission fluid filters. Automatic transmissions require a filter to remove contaminating particulate materials, generated during the operation of the automatic transmission.

[0003] Current serial filtration media for use in automobile transmission filters include a layer of polyester felt and a layer of screen held together by a scrim of low melting point polyester adhesive, typically melting at 120.degree. C. The polyester adhesive has a negative impact on the flow and pressure drop in the filter. The polyester adhesive, when applied under heat and pressure to bond the felt layer with the screen layer, oozes into the felt and screen pores, partially blocking the pores in the filtration media. In addition, the pressure from the adhesive application rollers causes the openings in the felt to be squeezed into a smaller size. Both the partial pore blockage and the pore squeezing that occur during the adhesive application affect the flow, the pressure drop and the particle size intercepted. Uneven pore blockage from the adhesive application can lead to further filtration problems, including uneven fluid flow across the filter, and dumping of contamination through the filter due to hydraulic, thermal, and mechanical shock.

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Thus, claims 1-12 and 22-25 essentially differ from the known prior art by specifying a “*sonic weld*.” Interestingly, Applicants admit (see PG Pub. US 2002/0121473) that the use of adhesives and sonic welding techniques are known equivalent techniques of bonding elements together:

[0037] However, in an alternative embodiment to that depicted in FIGS. 7-18 and as can be appreciated by those skilled in the art, filter element 140 is not removably disposed in housing 120, but rather inserted into housing 120 such that end wall flange 166 abuts against recess 138 of housing 120. A permanent seal may then be formed between the resulting abutting surfaces to permanently seal housing 120 at end wall 160. Such abutting surfaces are depicted in FIG. 13, for example. The permanent seal of this alternative embodiment may be effectuated by methods known to those of skill in the art, including, for example, adhesives and bonding agents, or if the pertinent portions of the structures are of the same or compatible thermoplastic materials, the materials can be heat-bonded (fused or melt bonded) together, or solvent bonded together. Further, permanent seals presently contemplated may be formed by laser weld, hot plate weld, induction weld, or vibration weld. It is presently preferred to use sonic welding of the pertinent portions of the structures, namely sonically welding the perimeter of end wall flange 166 to recess 138 of housing 120 to form a sonic shear weld.

The Examiner agrees with Applicants in that one skilled in the art would consider the use of adhesives and sonic (i.e. “heat bonded”) welds to be equivalent methods of effectuating a permanent seal, since they are well known to those skilled in the art. Accordingly, the use of a sonic weld to seal the media (admitted to be known by Applicants) together, would have been obvious.

***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

In the spirit of compliance with 37 CFR 1.56, 1.97 and 1.98, Applicants may wish to disclose any references made known to them during the prosecution application Serial Numbers 10/087,119 and 10/932,887, via an Information Disclosure Statement.

Any inquiry concerning this communication should be directed to Robert J. Popovics at telephone number (571) 272-1164.

A handwritten signature in black ink, appearing to read 'R. J. Popovics', with a large, stylized initial 'R' and a long horizontal stroke extending to the right.

Robert James Popovics  
Primary Examiner  
Art Unit 1724

October 31, 2005